

IN THE CLAIMS

1. (Currently Amended) A signaling network ~~switch~~ processing device comprising:
a network interface for coupling to a network; and
a processor coupled with the network interface, wherein the processor is adapted to
establish a call manager connection with a call manager;
exchange signaling messages over the call manager connection to establish a first
communicative connection through a network with an endpoint other than the call manager,
the signaling messages not including any voice data;
~~establish a second connection;~~
~~receive audio content through the second connection;~~
analyze received audio content to determine whether the received audio content
includes a periodic signal;

transmit to the endpoint through the first communicative connection data packets that
~~contain an encoded form of the~~ representing the received audio content;

~~analyze the audio content; and~~
transmit to the endpoint through the communicative connection a warning signal if the
received audio content includes the periodic signal if a periodic signal is detected in the audio
~~content, transmit through the first connection a warning signal.~~
2. (Currently Amended) The signaling network ~~switch~~ processing device of claim 1,
wherein
analyzing the received audio content is performed by looking ahead.
3. (Currently Amended) The signaling network ~~switch~~ processing device of claim 1,
wherein
the periodic signal has a double periodicity.
4. (Currently Amended) The signaling network ~~switch~~ processing device of claim 1,
wherein
the warning signal is in-band.

5. (Currently Amended) The signaling network ~~switch~~ processing device of claim 1, wherein

the warning signal is out of band.

6. (Currently Amended) The signaling network ~~switch~~ processing device of claim 5, wherein

the warning signal is a named signaling event.

7. (Currently Amended) The signaling network ~~switch~~ processing device of claim 1, the processor is further adapted to:

determine an ending of the periodic signal; and
transmit a clear signal corresponding to the ending.

8 (Currently Amended) The signaling network ~~switch~~ processing device of claim 1, the processor is further adapted to:

determine a duration of the periodic signal; and
encode the duration in the warning signal.

9. (Currently Amended) A signaling network call manager comprising:
a network interface for coupling to a network; and
a processor coupled with the network interface, wherein the processor is adapted to
establish a first network call manager connection ~~that does not transmit voice data~~
with a first network device, the first network call manager connection being an out of band connection;

establish a second network call manager connection ~~that does not transmit voice data~~
with a telephone endpoint including an IP telephone with an acoustic echo canceller, the second call manager connection being an out of band connection a second device;

~~assist the first device establish a communication connection with the second device through a packet switched network~~ assist the network device in establishing an communicative connection through a packet switched network to the telephone endpoint, the communicative connection being an in band connection and used by the network device to transmit voice data to the telephone endpoint;

generate one of a first periodic signal and an instruction for a second periodic signal to be played by the telephone endpoint ~~one of the first and second devices;~~

encode a time duration of one of the first periodic signal and the second periodic signal in a warning signal;

transmit the warning signal in at least one packet through ~~one of the first and second connections~~ the second network call manager connection to be received by ~~an the IP~~ telephone with ~~an the~~ acoustic echo canceller; and

transmit the generated one of the first periodic signal and the instruction through ~~one of the first and second connections~~ the second network call manager connection;[[.]]

wherein the voice data is not transmitted through either the first or second network call manager connection.

10. (Currently Amended) The signaling network ~~switch~~ call manager of claim 9, wherein

one of the first and second periodic signals has a double periodicity.

11. (Currently Amended) The signaling network ~~switch~~ call manager of claim 9, the processor is further adapted to:

identify a type of one of the first periodic signal and the second periodic signal; and determine the time duration from the identified type.

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Currently Amended) A device comprising:

means for establishing a signaling path with a call manager;

means for exchanging communications over the signaling path with the call manager to establish a communicative connection through a packet switched network to an endpoint, the endpoint being physically separate from the call manager;

~~means for establishing a first connection through a network and a second connection;~~

means for receiving detecting whether received audio content includes a periodic signal through the second connection;

means for transmitting through the first communicative connection data packets that ~~contain an encoded form of~~ represent the received audio content;
~~means for analyzing the audio content; and~~
means for transmitting through the first communicative connection a warning signal if when [[a]] the periodic signal is detected in the received audio content.

19. (Currently Amended) The device of claim 18, wherein
the means for ~~analyzing~~ detecting whether the received the audio content includes the
periodic signal is adapted to look ahead.

20. (Original) The device of claim 18, wherein
the periodic signal has a double periodicity.

21. (Original) The device of claim 18, wherein
the warning signal is in-band.

22. (Original) The device of claim 18, wherein
the warning signal is out of band.

23. (Original) The device of claim 22, wherein
the warning signal is a named signaling event.

24. (Original) The device of claim 18, further comprising:
means for determining an ending of the periodic signal; and
means for transmitting a clear signal corresponding to the ending.

25. (Original) The device of claim 18, further comprising:
means for determining a duration of the periodic signal; and
means for encoding the duration in the warning signal.

26. (Currently Amended) A device comprising:
means for establishing a first network call manager connection ~~that does not transmit~~
~~voice data~~ with a gateway that couples a non packet switched network to a packet switched
network first device;

means for establishing a second network call manager connection with a telephone endpoint that does not transmit voice data with a second device;

means for assisting the gateway first device in establishing a communication connection call with the second device through ~~[[a]]~~ the packet switched network to the telephone endpoint;

means for generating one of a first periodic signal and an instruction for a second periodic signal to be played by the telephone endpoint one of the first and second devices;

means for encoding a time duration of one of the first periodic signal and the second periodic signal in a warning signal;

means for transmitting the warning signal in at least one packet through ~~one of the first and second connections~~ the second network call manager connection to be received by the telephone endpoint an IP telephone with an acoustic echo canceller; and

means for transmitting the generated one of the first periodic signal and the instruction through the second network call manager connection to be received by the telephone endpoint one of the first and second connections.

27. (Original) The device of claim 26, wherein
one of the first and second periodic signals has a double periodicity.

28. (Original) The device of claim 26, further comprising:
means for identifying a type of one of the first periodic signal and the second periodic signal; and
means for determining the time duration from the identified type.

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Currently Amended) An article comprising: a storage medium, said storage medium having stored thereon instructions, that, when executed by at least one device, result in:

exchanging signaling messages over the call manager connection to establish a first communicative connection through a network with an endpoint;
establishing a second connection;

~~receiving audio content through the second connection;~~
~~analyzing received audio content to determine whether the received audio content~~
~~includes a periodic signal;~~
~~transmitting to the endpoint through the first communicative connection data packets~~
~~that contain an encoded form of the representing the received audio content;~~
~~analyzing the audio content; and~~
~~transmit to the endpoint through the communicative connection a warning signal if the~~
~~received audio content includes the periodic signal if a periodic signal is detected in the audio~~
~~content, transmitting through the first connection a warning signal.~~

33. (Currently Amended) The article of claim 32, wherein
analyzing the received audio content is performed by looking ahead.

34. (Original) The article of claim 32, wherein the instructions further result in:
determining an ending of the periodic signal; and
transmitting a clear signal corresponding to the ending.

35. (Original) The article of claim 32, wherein the instructions further result in:
determining a duration of the periodic signal; and
encoding the duration in the warning signal.

36. (Currently Amended) An article comprising: a storage medium, said storage
medium having stored thereon instructions, that, when executed by at least one device, result
in:

establishing a first network call manager connection ~~that does not transmit voice data~~
with a first network device;

establishing a second network call manager connection ~~that does not transmit voice~~
~~data with a telephone endpoint including an IP telephone with an acoustic echo canceller-a~~
~~second device;~~

~~assisting the first device establish a communication connection with the second device~~
~~through a packet switched network assist the network device in establishing a communicative~~
~~connection through a packet switched network to the telephone endpoint;~~

generating one of a first periodic signal and an instruction for a second periodic signal
to be played by the telephone endpoint ~~one of the first and second devices;~~

encoding a time duration of one of the first periodic signal and the second periodic signal in a warning signal;
transmit the warning signal in at least one packet through ~~one of the first and second connections~~ the second network call manager connection to be received by ~~an~~ the IP telephone with ~~an~~ the acoustic echo canceller; and
transmitting the generated one of the first periodic signal and the instruction through ~~one of the first and second connections~~ the second network call manager connection.

37. (Original) The article of claim 36, wherein one of the first and second periodic signals has a double periodicity.

38. (Original) The article of claim 36, wherein the instructions further result in:
identifying a type of one of the first periodic signal and the second periodic signal;
and
determining the time duration from the identified type.

39. (Cancelled)

40. (Cancelled)

41. (Cancelled)

42. (Cancelled)

43. (Cancelled)

44. (Cancelled)

45. (Original) A method comprising:
establishing a first connection through a network;
establishing a second connection;
receiving audio content through the second connection;
transmitting through the first connection data packets that contain an encoded form of the audio content;
analyzing the audio content; and
if a periodic signal is detected in the audio content, transmitting through the first connection a warning signal.

46. (Original) The method of claim 45, wherein analyzing the audio content is performed by looking ahead.

47. (Original) The method of claim 45, wherein the periodic signal has a double periodicity.

48. (Original) The method of claim 45, wherein the warning signal is in-band.

49. (Original) The method of claim 45, wherein the warning signal is out of band.

50. (Original) The method of claim 49, wherein the warning signal is a named signaling event.

51. (Original) The method of claim 45, further comprising:
determining an ending of the periodic signal; and
transmitting a clear signal corresponding to the ending.

52. (Original) The method of claim 45, further comprising:
determining a duration of the periodic signal; and
encoding the duration in the warning signal.

53. (Currently Amended) A method comprising:
establishing a first network call manager connection that does not transmit voice data with a first network device;
establishing a second network call manager connection that does not transmit voice data with an endpoint ~~a second device~~;
exchanging Session Initiation Protocol (SIP) signaling messages over the first and second call manager connections to assisting the first network device in establishing a communication connection with the second device endpoint through a packet switched network;

generating one of a first periodic signal and an instruction for a second periodic signal to be played by an IP telephone associated with the endpoint ~~one of the first and second devices;~~

encoding a time duration of one of the first periodic signal and the second periodic signal in a warning signal;

transmitting the warning signal in at least one packet through the second call manager connection ~~one of the first and second connections~~ to be received by an the IP telephone with that includes an acoustic echo canceller; and

transmitting the generated one of the first periodic signal and the instruction through the second call manager connection ~~one of the first and second connections.~~

54. (Original) The method of claim 53, wherein one of the first and second periodic signals has a double periodicity.

55. (Original) The method of claim 53, further comprising:
identifying a type of one of the first periodic signal and the second periodic signal;
and
determining the time duration from the identified type.

56. (Cancelled)

57. (Cancelled)

58. (Cancelled)

59. (Cancelled)

60. (Cancelled)

61. (Cancelled)

62. (Cancelled)